



**CITY OF GENEVA
BUILDING DIVISION**
109 JAMES STREET
GENEVA, IL 60134
630/262.0280
www.geneva.il.us

Electric Upgrade (Residential) Permit

Revised: 8/27/2025

A building permit is required prior to upgrading a residential electric service. The following are guidelines and comments for obtaining an electric upgrade permit.

Application and Drawing Procedures:

- An Application for permit is to be filled out and submitted to the Building Division.
- For general permit application questions for any property within the City of Geneva, please contact the Building Division at 630 262-0280 or pdf@geneva.il.us.
- Mill Creek residents with building permit questions should contact the Kane County Building Division at 630 232-3485 because Mill Creek properties are not within the corporate limits of the City of Geneva.
- The contractor's name, address, phone number and, if required, their license numbers are to be filled out when submitting the application.
- The new service must be installed per the requirements of The City of Geneva Electric Division.
- Two (2) copies of the plans showing the following information:
 - Panel Location (cannot be installed in closet or bathroom)
 - Type of service (overhead or underground)
 - Service size (100A, 200A or other)
 - Location of disconnect (at Meter or Main service Panel)
 - Service entrance conductors & feeders (wire size/type plus conduit size)
 - Grounding & bonding provide size of grounding electrode conductors (Ground Rods + water)
 - Provide the above information on a detailed 1-line electrical diagram and include equipment specs.
- Permit fee is paid after review and approval of all required documents; you will be called when permit is ready to be picked up. Review time is usually 10 days after ALL required documents are received.

Fees: Residential Electrical Upgrade

- \$50.00 plan review fee plus
- \$75.00 for the first \$1,000 of project cost plus
- \$10 per each thousand or portion of the project cost after the first \$1,000
- **Re-inspection fee:** \$75.00 to be paid prior to re-inspection if an inspection has failed.
- We accept cash, check (made payable to the City of Geneva), MC, VISA, MC, and AMEX.

General Comments:

- Emergency Disconnect requirements
 - Emergency (external) Disconnect **is required** if service size is upgraded or a new service is installed. Two examples are 1) 100 amp to a 200 amp service upgrade or 2) completely new service.
 - Emergency (external) Disconnect **is not required** if replacing a panel due to faulty service equipment in need of repair, service equipment wiring in need of repair, or other fire safety concern. For example recalled panel, damaged panel, aluminum feeders- or other legitimate safety concern. (Note: Where only meter sockets, service entrance conductors, or related raceway and fittings are replaced an Emergency Disconnect is not required- this exception generally applies to storm or tree damage)
 - Meter pedestals shall have a 3' x 3' clear space from patios, decks, ac units and other obstructions.

- A service light must be installed near electrical panel.
- Placement of one (1) GFCI at the panel for service.
- Ground rods to be installed and bonded per 2023 NEC.
- A service grounding electrode shall run continuous from the panel to street side of water meter and jumped back to the house side of the meter. The size is determined by the 2023 NEC table 250.66.
- A minimum of 24-hour notice is required when scheduling any inspection.
- Service size to be a minimum of 100 amp or the load calculation, whichever is greater.
 - New One or Two Family - 200 amp minimum service per unit
 - Multi-Family – 100 amp minimum service per unit
- Overhead attachments to structure per City of Geneva Electric Division. See handouts included in packet.
- Service conductors should meet the following:
 - 3/0 copper for 200 amp service.
 - 1/0 copper for 150 amp service.
 - #3 copper for 100 amp service.

Inspections – Clarification and Details:

The following is a list of inspections that may be required for your project and the approximate amount of time it will take for the inspection.

- | | |
|--|-----------------|
| ✓ Final Inspection | 1/2 hour |
| ✓ Electric Division Inspection & energizing | 1/2 hour |

The following are general guidelines and details on the types of inspections that may be required for your project. For further clarification, please call our office and speak with one of our building inspectors.

Final:

- ✓ Check for panel/disconnect location.
- ✓ Check all bonding and grounding, may require opening panels (panel, meter, water, ground rod(s))
- ✓ Confirm breaker panel labeling.
- ✓ Building Department inspection must be approved prior to the City of Geneva Electrical Division inspection and energizing or re-energizing the service.

Building Codes:

The following are the Building Codes the City of Geneva has adopted.

- City of Geneva Municipal Code
- 2021 Int'l Building Code w/amendments
- 2021 Int'l Mechanical Code
- 2023 Nat'l Electrical Code
- 2014 State Plumbing Code
- 2021 Int'l Residential Code w/amendments
- 2021 Int'l Fire Code w/amendments
- 2021 Int'l Energy Conservation Code
- 2021 Int'l Swimming Pool and Spa Code (ISPSC)
- 2021 Int'l Fuel and Gas Code w/amendments

Homeowner – Contractor Responsibilities:

- It is the responsibility of the homeowner/contractor to schedule with the required inspections. The required inspections are indicated on the plan review form, which is attached to your permit and the field copy of drawings. When calling to schedule an inspection, please have the address and permit number available.
- Inspections shall be canceled a minimum of 24 hours before the scheduled time.

GENERAL INFORMATION REGARDING RESIDENTIAL
ELECTRIC SERVICE UPGRADES

1. The homeowner shall obtain a building permit from City Hall, 630-262-0280.
2. The homeowner shall contact the Electric Utility with the address of the electric service upgrade and when an inspection will be needed, 630-232-1503.
3. If the services passes inspection, see number 4. If the service fails the inspection, the utility will inform the homeowner of any items that are deficient and set up a time to reinspect.
4. If needed, the utility will upgrade the overhead wire free of charge at its earliest convenience. If the service is underground, and the wire is not adequate, the homeowner shall arrange to have a new underground service installed.
5. The homeowner has several options for having a new underground service installed.
 - a. The homeowner can dig the trench (30" deep), install the 3" schedule 40 gray PVC, pull the wire and backfill the trench. The City would build the riser up the pole and energize the service.
 - b. The City can dig the trench, install the 3" schedule 40 gray PVC, backfill the trench, pull the wire in and energize the service.
 - c. The homeowner can hire a contractor to install the new service, with the City just energizing the service. The contractor must familiarize himself with the City's policies and standard procedures. All work is subject to inspection.
6. The homeowner pays for complete service installation for underground service.
7. The homeowner is responsible for all restoration of property to its original condition.
8. The City of Geneva follows Commonwealth Edison Company specifications for residential electric service upgrades.
9. This list is not all-inclusive. The City of Geneva can be contacted for an onsite meeting to discuss the specifics of the service upgrade.

VERTICAL CLEARANCE FROM GROUND

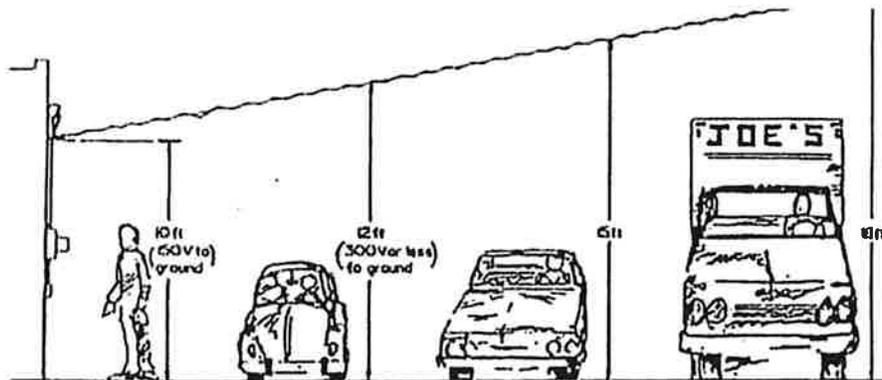
Service - drop conductors where not in excess of 600 volts, nominal, shall have the following minimum clearance from final grade.

10 feet - at the electric service entrance to buildings, or at the drip loop of the building electric entrance, measured from final grade or other accessible surface only for service - drop cables supported on and cabled together with a grounded bare messenger and limited to 150 volts to ground.

12 feet - for those areas listed in the 15 foot classification when the voltage is limited to 300 volts to ground.

15 feet - over residential property and driveways, and those commercial areas not subject to truck traffic.

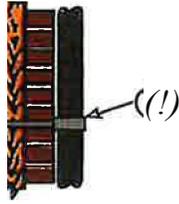
18 feet - over public streets, alleys, roads, parking areas subject to truck traffic, driveways on other than residential property, and other land traversed by vehicles such as cultivated, grazing, forest and orchards.



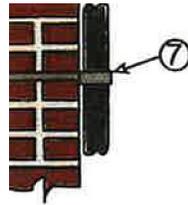
City of Geneva- Steel Conduit Service Riser

For Service Entrance Capacity of 400 Amperes or Less - Single-Phase
200 Amperes or Less - Three-Phase

All installations shall follow 2023 NEC

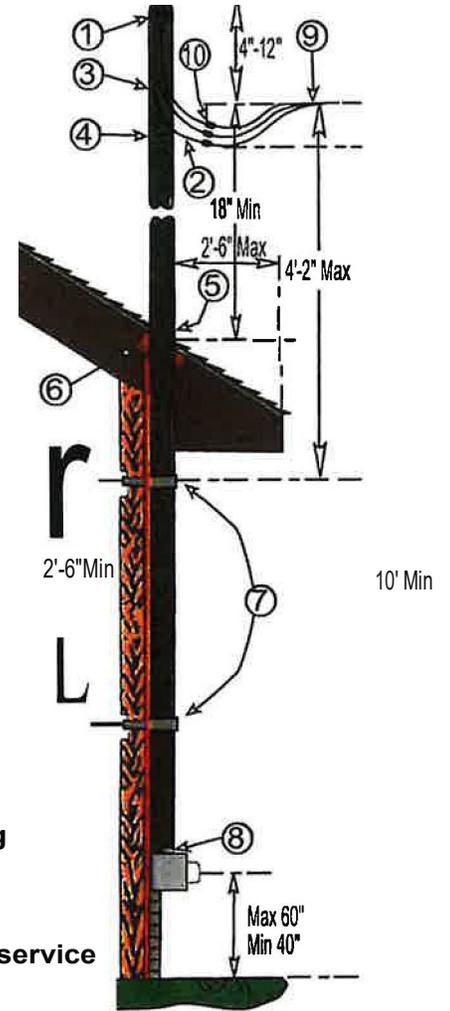


Installation on Brick Veneer Wall



Installation on Brick Wall

Installation on Frame or Stucco Wall



* Ground wire must be bonded in the meter can

NO ROOF PLATES PERMITTED

I. Customer furnishes, installs, and maintains the following equipment:

- 1) Service head (Weatherhead)
- 2) Service run wires (allow a minimum of 24 inches beyond the service head to make connections to service drop)
- 3) Service attachment (Porcelain)
- 4) Rigid steel conduit - 2 1/2" for 100 ampere or smaller or 3" for larger service entrance equipment or metallic raceway of equivalent strength may be used.
- 5) Metal flashing sealed with mastic. (See Note)
- 6) 2" x 4" blocking solidly installed between rafters. (See Note)
- 7) Mounting clamp with 1/2" bolts, nuts, and washers. For frame, stucco, or brick veneer, install bolts in center line of studding or, in the case of two bolt strap attachment, straddling a stud with an anchor plate bridging stud.
- 8) Meter connection device adapter. (Hub)

II. Company furnishes, installs, and maintains the following equipment:

- 9) Service drop dead-end (Bail)
- 10) Connectors for connecting Customer's wires to service drop.

Note: Items 5 and 6 required where the riser extends through the roof.

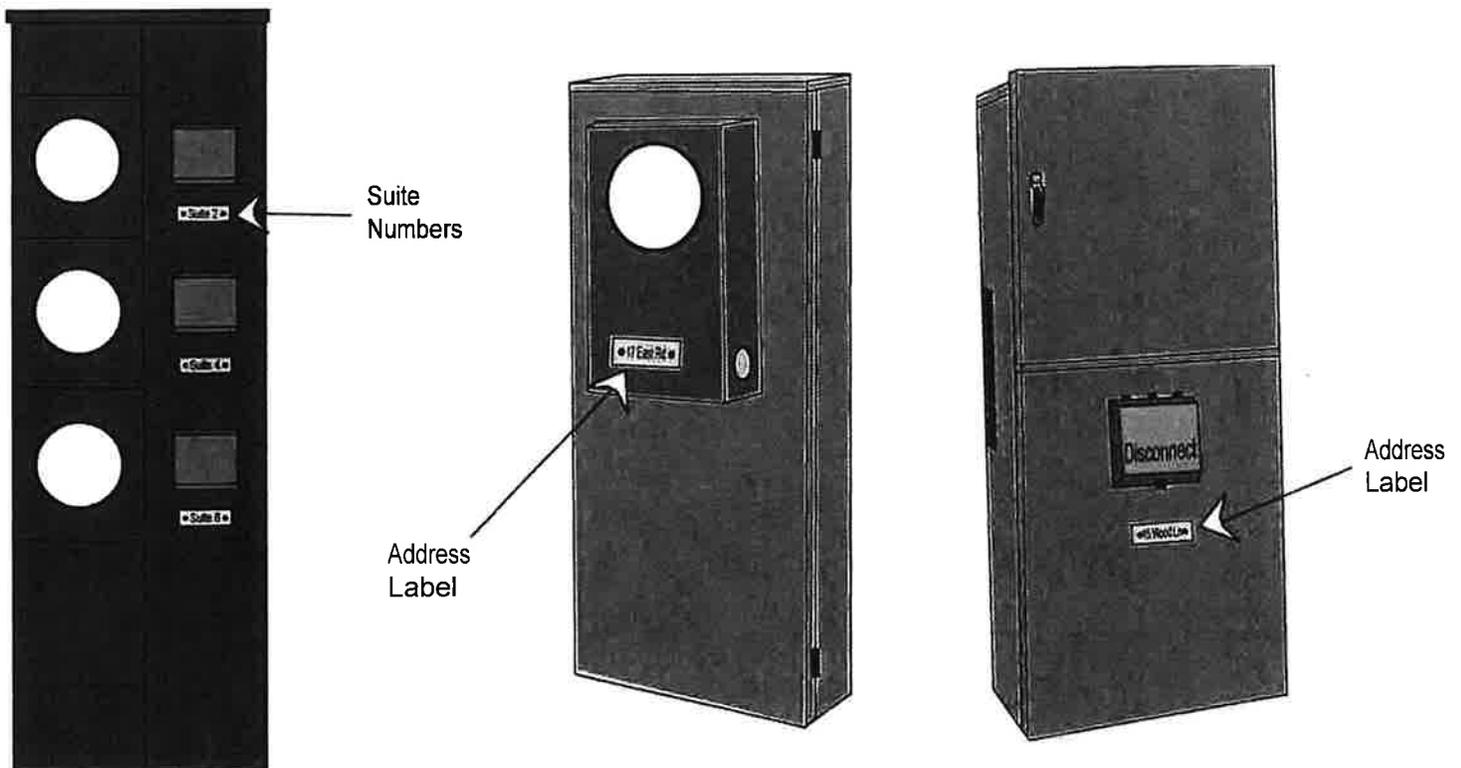
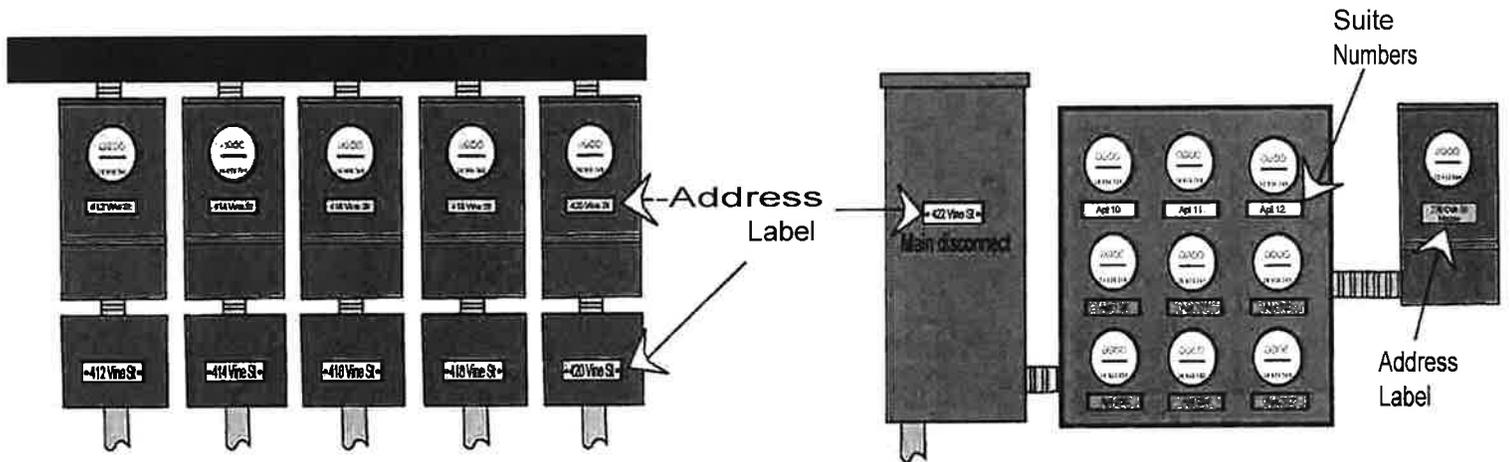
City of Geneva - Meter Address Labeling

Meter address labels must be installed on EVERY commercial building AND residential building with more than one address (i.e. two flat, duplex, apartments, etc).

Meter Socket Service Disconnect Labeling

- Meter sockets must be permanently labeled to indicate the part of the premises they serve, for example, the suite (0-99 = Basement, 100-199 = 1st floor, etc.) number in addition to complete address(number and street name).
- The customer's name is not acceptable.
- The labels must be engraved phenolic nameplates, at least 1"high, and riveted into panel cover.
- Felt-tip pens and label maker tape are not considered permanent marking.

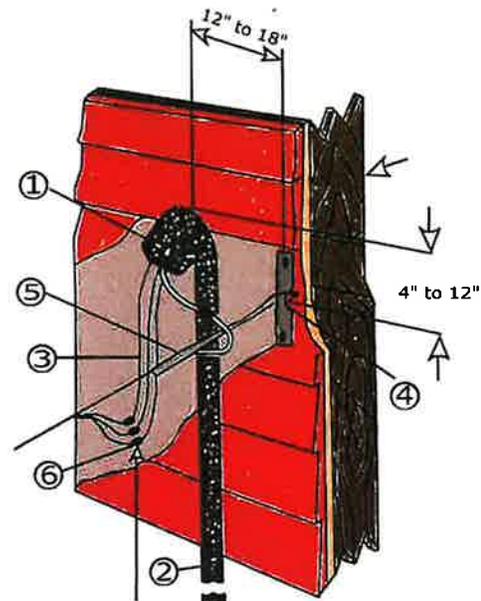
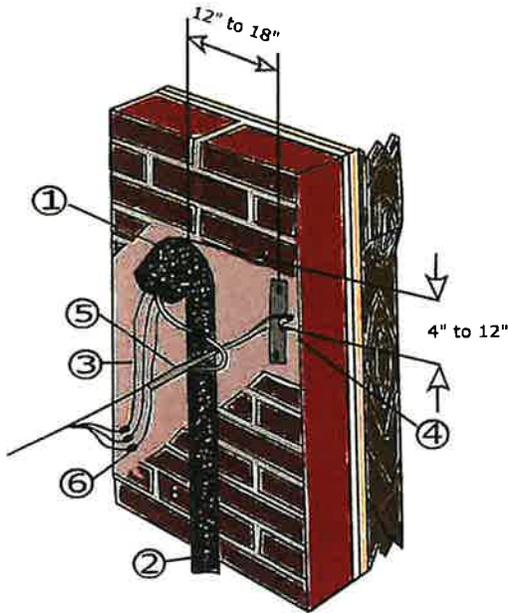
Service Will Not Be Established Until Label Is Complete



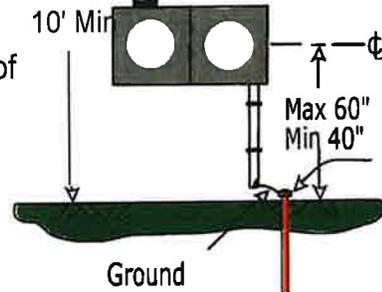


City of Geneva- Service Attachments

For Frame, Stucco, or Brick Veneer installations 400 Amperes or less- Single-Phase
200 Amperes or less- Three-Phase



Single socket or Single Row of
Horizontal Grouped Sockets



*Grounding wire must be bonded in meter can

I. Customer furnishes, installs, and maintains the following equipment:

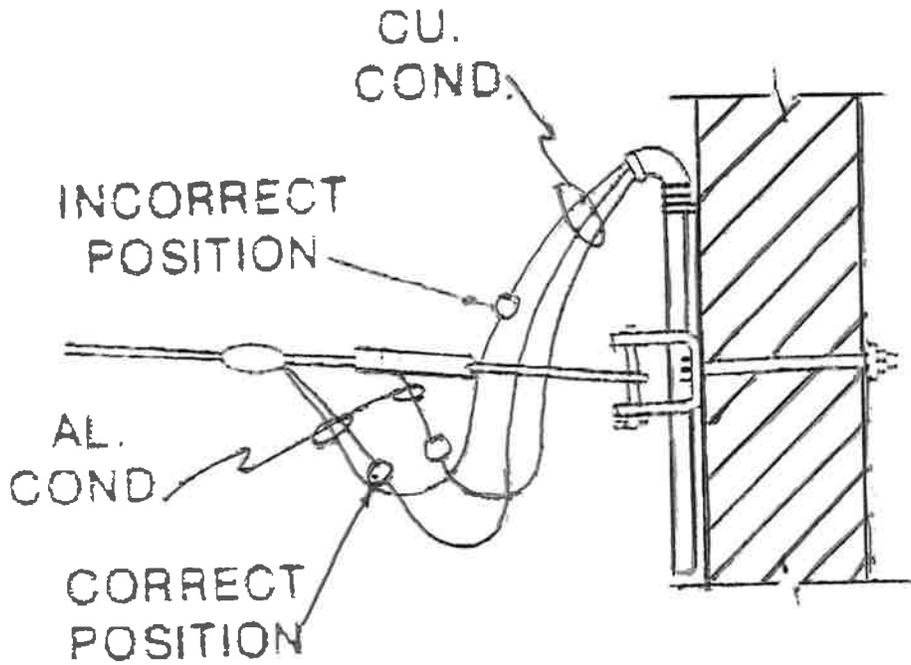
- 1) Service head (Weatherhead)
- 2) Service mast
- 3) Service run wires (allow a minimum of 18 inches beyond the service head to make connections to service drop)
- 4) Service attachment wall strap (Joslyn #J7692 or equivalent to the center line of studding with 4" long 1/2" lags.
When used on brick wall, service attachment wall strap shall be used with two 1/2"

II. Company furnishes, installs, and maintains the following equipment:

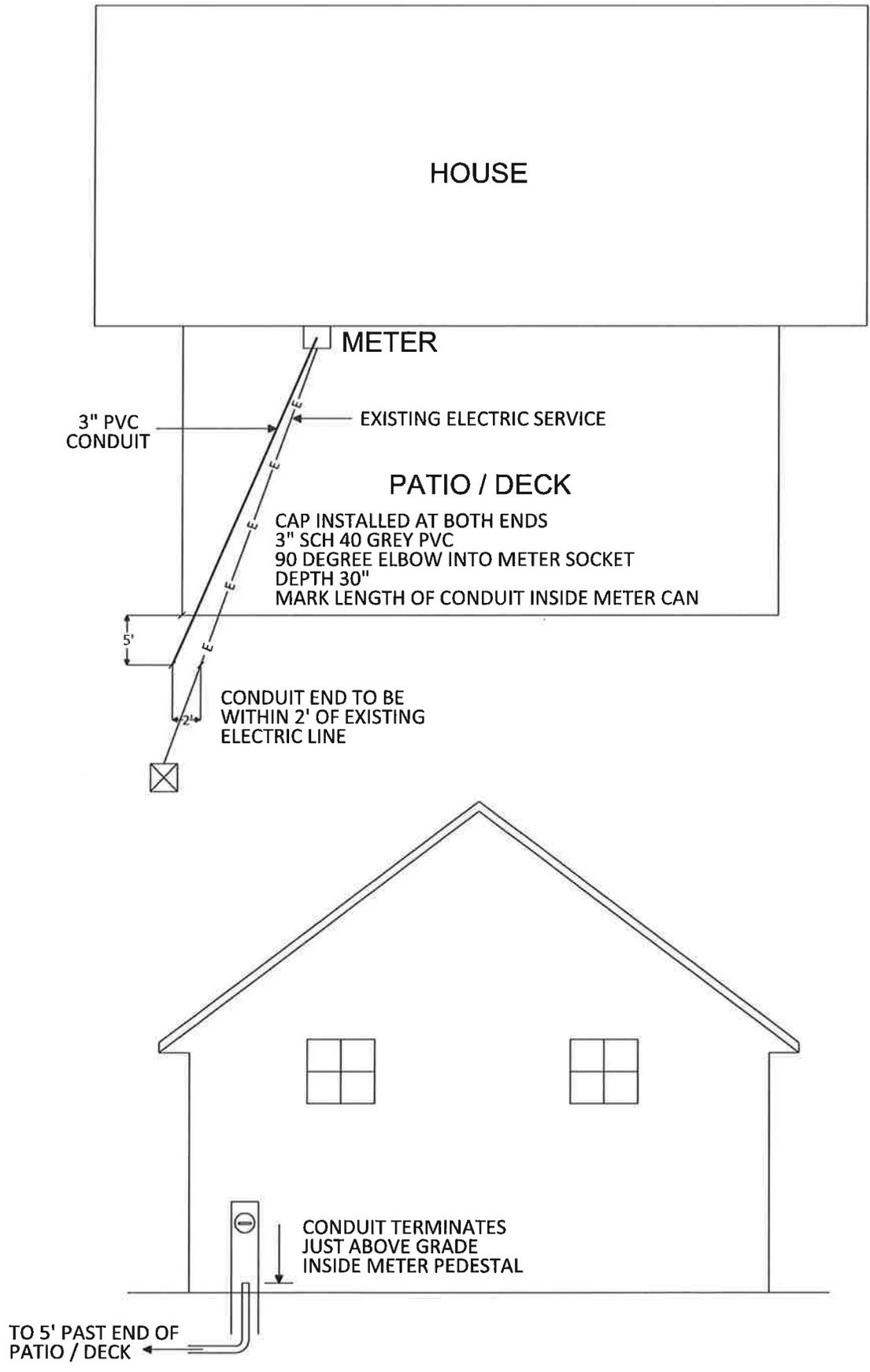
- 5) Service drop dead-end
- 6) Connectors for connecting Customer's wires to service drop.

City of Geneva- Service Wiring

For Frame, Stucco, or Brick Veneer installations 400 Amperes or less- Single-Phase
200 Amperes or less- Three-Phase

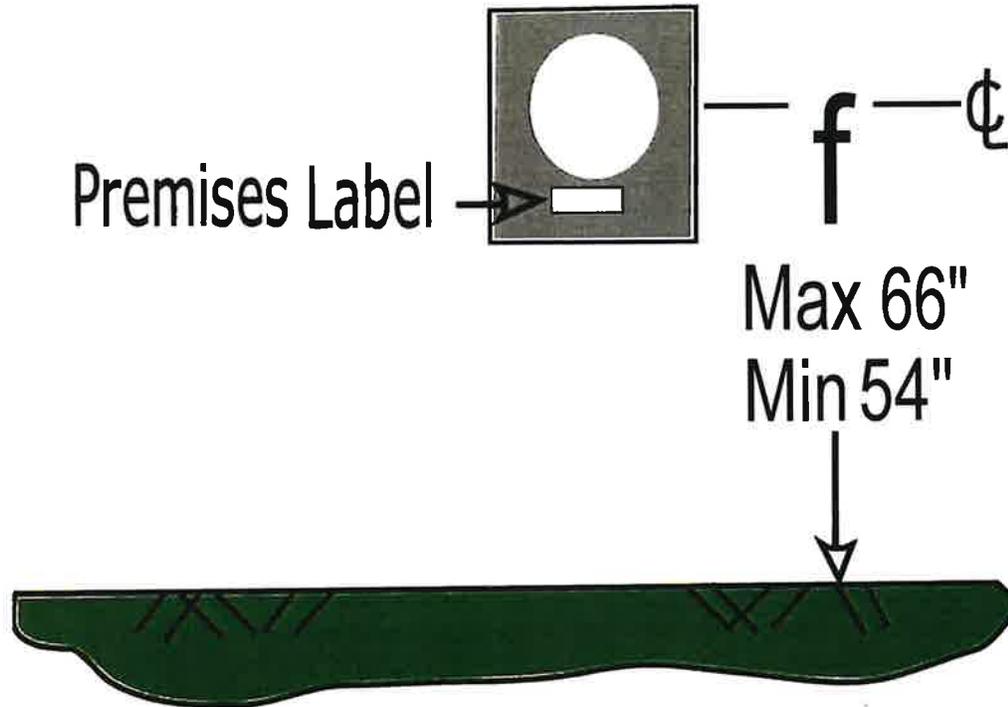


CITY OF GENEVA ELECTRIC DEPT.
UNDERGROUND METER SOCKET DETAIL



City of Geneva- Meter Specification

Transformer Rated Socket



*Ground wire must be bonded in meter can



CITY OF GENEVA
BUILDING DEPARTMENT
109 JAMES STREET
GENEVA, IL 60134
630/262.0280
pdf@geneva.il.us

For Office Use Only

PERMIT NUMBER _____

BIN NUMBER _____

APPLICATION FOR PERMIT

PROJECT ADDRESS _____

APPLICANT _____ Check here if applicant is property owner

Name _____
 Address _____
City State Zip
 Email _____ Phone _____

PROPERTY OWNER _____

Name _____
 Address _____
City State Zip
 Email _____ Phone _____

CONTRACTOR _____

Name _____
 Address _____
City State Zip
 Email _____ Phone _____
 Roofing License _____ Plumbing License _____

BUILDING TYPE

Residential
 Commercial
 Other

TYPE OF WORK - GENERAL

Change of Tenant Addition
 Remodel Demolition
 New construction Other

TYPE OF WORK - SPECIFIC (Check all that apply)

Driveway/Parking Replace Windows Fence Electric
 Sidewalk Roof/Siding Patio Plumbing
 Basement/Attic Sign/Awning Shed HVAC
 Kitchen/Bath Irrigation System Deck Other

DESCRIPTION OF WORK

Applications will not be accepted without supporting documentation, attach additional sheets and submit plans/drawings, plat of survey, etc. as needed to illustrate proposed work

HISTORIC PRESERVATION

Is subject property located in the Historic District or a Historic Landmark? Historic Preservation Commission review is required for exterior improvements.
 Yes No

ZONING

What zoning district is the property located in? _____
 Is the use permitted at this location? Yes No
 Is a variance needed? Yes No

PROJECT COST

What is the estimated project cost? _____

I HEREBY CERTIFY THAT I AM THE OWNER OF RECORD OR THAT THE PROPOSED WORK IS AUTHORIZED BY THE OWNER OF RECORD; THAT I HAVE BEEN AUTHORIZED BY THE OWNER TO MAKE THIS APPLICATION AND TO SCHEDULE ALL NECESSARY INSPECTIONS AS AN AGENT, AND THAT I AGREE TO CONFORM TO ALL APPLICABLE CODES, LAWS, AND ORDINANCES OF THE CITY OF GENEVA.

Signature _____ Date _____

For Office Use Only

| | |
|-----------------------------|---------------------------------|
| FEEES | ROUTING |
| Building Permit Fee _____ | Engineering _____ |
| Fire Department Fee _____ | Historic Preservation _____ |
| Plumbing Fee _____ | Fire _____ |
| Public Works Fee _____ | Tree Preservation Review _____ |
| Tree Preservation Fee _____ | Electric _____ |
| TOTAL FEES _____ | City Engineer _____ |
| | Planning/Zoning _____ |
| | First Inspection Services _____ |